UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,497	11/19/2003	Alok Kumar	10559-875001 / P17394	8237

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EXAMINER
NGUYEN, VAN H

ART UNIT	PAPER NUMBER
2194	

NOTIFICATION DATE	DELIVERY MODE
08/06/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

	Application No.	Applicant(s)
Office Action Summary	10/718,497	KUMAR ET AL.
	Examiner	Art Unit	
	VAN H. NGUYEN	2194	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>06 May 2009</u>.
2a) ☐ This action is **FINAL**.　　2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-15,27-32,42 and 43</u> is/are pending in the application.
　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>1-11,15,27-32,42 and 43</u> is/are rejected.
7) ☒ Claim(s) <u>12-14</u> is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
　　a) ☐ All　b) ☐ Some * c) ☐ None of:
　　　　1. ☐ Certified copies of the priority documents have been received.
　　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.
　　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

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DETAILED ACTION

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1.   This communication is responsive to the amendment filed 05/06/2009.

Claims 1-15, 27-32, 42 and 43 are pending in the application.

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Claim Rejections - 35 USC § 103

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2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

> This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the
> examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions
> covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37
> CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later
> invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35
> U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-11, 15, 27-32, 42 and 43 are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Martin et al.** (US 7046778 B2) in view of **Chen et al.** (US 6958973

B1).

As to claims 1, 27, and 42:

Martin teaches a method, computer program product, and computer system (col.2, line 27-col.3, line 23), comprising:

at a computer, dynamically binding an event context to an execution context in response to receiving events (process is invoked in response to the event which dynamically binds to a processing context that identifies an action, e.g., operation, to be executed to provide a selected communication service) [col.2, line 65-col.3, line 23], by:

storing, in a memory associated with the computer, arriving events that is accessible by event contexts [col.28, lines 28-58 and col.33, lines 24-27];

associating, at the computer, an event queue with the execution context to temporarily store events for the event context for a duration of the dynamic binding [col.30, lines 10-45 and col.35, line 62-col.36, line 20].

Martin, however, does not specifically teach the use of a global event queue and storing, in the memory, events from the global event queue in per-execution context event queues.

Chen teaches the use of a global event queue and storing, in the memory, events from the global event queue in per-execution context event queues (see Figs. 4-6 and the associated text).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Martin with Chen because it would have provided an improved and simplified output queuing method for forwarding packets in sequence.

As to claim 2:

Martin teaches execution context can be in one of four states, idle, binding, bound, or unbinding binding [col.2, line 65-col.3, line 23].

As to claim 3:

Martin teaches in the bound state, an execution context is bound to a specific event context and the execution context processes events for that event context and the event queue associated with that execution context is used to store events for the event context to which it is bound [col.2, line 65-col.3, line 23; col.28, lines 28-58; and col.33, lines 24-27].

As to claim 4:

Martin teaches in the unbinding state, the execution context determines if it has any more events to process for the event context to which it was bound and either unbinds itself from the event context, going to idle state or begins processing another event from that context, going back to bound state [col.2, line 65-col.3, line 23; col.28, lines 28-58; and col.33, lines 24-27; see also, Fig.49A and the associated text].

As to claim 5:

Martin teaches in the event context can be in one of two states, unbound or bound [col.2, line 65-col.3, line 23].

As to claims 6 and 43:

Chen teaches the global FIFO event queue is used to queue events when the events first arrive into the system (see Figs. 4-6 and the associated text).

As to claims 7 and 28:

Chen teaches maintaining execution contexts in an idle state until an event arrives at a head of the global event queue (see Figs. 4-6 and the associated text).

As to claims 8 and 29:

Martin teaches assigning an execution context that is in idle state to process the packet
[col.2, line 65-col.3, line 23; col.28, lines 28-58; and col.33, lines 24-27; see also,
Figs.49A and 50 and the associated text].

As to claims 9 and 30:

Martin teaches removing an event from the events for the event context in the event
queue; determining the event context; and determining if the event context to which this
packet belongs is already bound to an execution context [col.2, line 65-col.3, line 23;
col.28, lines 28-58; and col.33, lines 24-27].

As to claims 10 and 31:

Martin teaches if the event context is already bound, binding an execution further
comprises placing the packet in the event queue of the other execution context to which
the event context associated with the packet is already bound to; unbinding the event
context; and returning to an idle state [col.2, line 65-col.3, line 23; col.28, lines 28-58;
and col.33, lines 24-27; see also, Figs.49A and 50 and the associated text].

As to claims 11 and 32:

Martin teaches if the event context is not already bound, binding an execution further
comprises binding the execution context to that event context by updating a state of the
execution context from idle to bound, updating the state of the event context from "not
bound" to bound, and recording that this execution context is bound to this event context;
and processing the event [col.2, line 65-col.3, line 23; col.28, lines 28-58; and col.33,
lines 24-27; see also, Figs.49A and 50 and the associated text].

As to claim 15:

Martin teaches the events are packets (packets).

Indication of Allowable Subject Matter

3.   Claims 12-14 are objected to as being dependent upon a rejected base claim, but would
be allowable if rewritten in independent form including all of the limitations of the base
claim and any intervening claims, subject to a final search.

Response to Arguments

4.   Applicant's arguments regarding claims 1-15, 27-32, 42, and 43 are persuasive. However,
new grounds of rejection are set forth in the Office Action.

Contact Information

5.   Any inquiry or a general nature or relating to the status of this application should
        be directed to the TC 2100 Group receptionist: (571) 272-2100.

        Any inquiry concerning this communication or earlier communications from the
        examiner should be directed to VAN H. NGUYEN whose telephone number is (571)
        272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM-
        6:00PM. The examiner can also be reached on alternative Friday. If attempts to reach the
        examiner by telephone are unsuccessful, the examiner's supervisor, HYUNG S. SOUGH
        can be reached at (571) 272-6799.

        The fax phone number for the organization where this application or proceeding is
        assigned is (571) 273-8300.

        Information regarding the status of an application may be obtained from the Patent
        Application Information Retrieval (PAIR) system. Status information for   published
        applications may be obtained from either Private PAIR or Public PAIR. Status
        information for unpublished applications is available through Private PAIR only. For
        more information about the PAIR system, see http://pair-direct.uspto.gov. Should you
        have questions on access to the Private PAIR system, contact the Electronic
        Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a
        USPTO Customer Service Representative or access to the automated information system,
        call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

        /VAN H NGUYEN/
        Primary Examiner, Art Unit 2194